## Official Correction to Opinions 278 and 382: the publication date amended for the genus-group names *Danaus*, *Heliconius*, *Nymphalis* and *Plebejus* (Insecta, Lepidoptera) from Kluk (1802) to Kluk (1780)

**Abstract.** Under Article 80.4 of the Code, the publication date for the names *Danaus*, *Heliconius*, *Nymphalis* and *Plebejus* is corrected to Kluk (1780), rather than Kluk (1802) and the spelling of the butterfly genus name *Plebejus* confirmed. These names were formerly treated in Opinions 124, 278, 382 and 450.

Keywords. Nomenclature; NYMPHALIDAE; LYCAENIDAE; NYMPHALINAE; DANAINAE; Heliconius; Nymphalis; Danaus; Plebejus; Plebeius; Plebeyus; butterflies; Kluk.

A letter was received from Emilio Balletto & Simona Bonelli (*Department of Life Sciences and Systems Biology, Via Accademia Albertina 13 – I-10123 Torino, Italy*, in April 2014 requesting an amendment to the entry on the Official List of Generic Names in Zoology for *Danaus, Heliconius, Nymphalis* and *Plebejus* to record that the correct publication date of the four lepidopteran generic names.

Emilio Balletto & Simona Bonelli provided the following information:

- 1. Opinion 124 (Smithsonian Miscellaneous Collections 73(8): 1–2, 28 October 1936) rejected the subdivisions of the genus *Papilio* used by Linnaeus in the tenth (1758) and following editions of *Systema naturae* as of (sub)generic value and thus as of date 1758. This point of view was reinforced in Opinion 279 (Opinions and Declarations 6: 179–188, 1 October 1954b) stating that any term placed between the generic and the specific name in the zoological works of Linnaeus and Fabricius was to be deemed unavailable as a name of (sub)generic value. However, in Opinion 124, the Commission also declared that it was 'prepared to take up individual cases under arguments which may be submitted' (Smithsonian Miscellaneous Publications 73(8): 2).
- 2. As concerns Lepidoptera, an application was submitted by Franclemont (1952), asking the Commission to validate under the plenary power, as from Linnaeus (1758) and as of (sub)generic value, the names used by this author for groups of species in the genus Phalaena, i.e. Bombyx, Noctua, Geometra, Tortrix, Pyralis, Tinea and Alucita, and as from 1767 the name Attacus, similarly published by Linnaeus. This application was opposed by Paclt (1952; re-published in 1957 as an appendix to Opinion 450, Opinions and Declarations 15(15): 251-328, 8 March 1957) on the ground that, 'if we accept any of these terms as being the names of subgenera, we should be bound logically to adopt the same course by analogy in the case of the terms used by Linnaeus for subdivisions of the genus Papilio', i.e. (1) Barbarus; (2) Eques; (3) Heliconius; (4) Danaus; (5) Nymphalis; (6) Plebejus. Of these, as noted by Paclt, the first two 'have been disregarded for many years', whereas the other four are still firmly in use and are all available as from Kluk (1802), as fixed by the Commission with the same Opinion 450 and typified in Opinions 278 (Danaus, Nymphalis and Plebejus) and 382 (Heliconius) (Opinions and Declarations 6(10): 135-178, 1 October 1954).
- 3. In the meantime, Paclt discovered in the Central Library of the Jagellonian University (Krakow) a copy of what seems to be the first edition of Kluk's work,

dated in the front page as of 1780 (Paclt, 1955). This information apparently was unknown to the Commission at least until Opinion 450 was published in 1957, even though Tutt (1906b, p. 304) had long before cited references from another copy of this edition (he erroneously cited *Plebeius* as from p. 81 in Kluk (1780), actually on p. 89). An unexpected problem thus arose, as in the copy of Kluk (1780) cited by Paclt, one of these butterfly genus names was printed differently from the spelling adopted by Linnaeus, and by Kluk himself in the 1802 edition, i.e. *Plebeius*, rather than *Plebejus* (cf. Linnaeus, 1758, pp. 483–485).

- 4. Following Paclt's (1955) discovery, some authors started citing this name as *Plebeius* Kluk, 1780, thus correcting both name spelling and publication date in respect to the entry *Plebejus* Kluk, 1802 listed in the 'Official Lists and Indexes of Names in Zoology' (Opinion 278, Opinions and Declarations, 6(1): 135–178, 1 October 1954) (see also the Official Lists at http://iczn.org/sites/iczn.org/files/officialists.pdf).
- 5. Crotch (1872, p. 60) was the first author to list *Papilio argus* Linnaeus, 1758 (p. 483) as the type species of *Plebeius* Kluk, 1780, even though he attributed this typification to Cuvier, who did not use binominal nomenclature. Kirby (1896, p. 87) shared a similar view, but proceeded to a more formal typification (see also Tutt, 1906a). Finally Hemming (1933, p. 224) designated *Papilio argus* Linnaeus, 1758 as the type species of *Plebejus* thereby making the two genus group names objective synonyms. Opinion 278 adopted the latter solution.
- 6. There are at least two distinct printings of Kluk (1780). The copy discovered by Tutt (1906b) was apparently identical to the copy found by Paclt (currently not available from the library of the Jagellonian University (see Bálint et al., 2001). A reprint of this edition is now available online http://delta.cbr.edu.pl/dlibra/doccontent?id=672&dirids=8 (at the agricultural library, Poland). A different printing is also currently available online http://books.google.it/books/about/Zwierz%C 4%85t\_domowych\_i\_dzikich\_osobliwie\_k.html?id=S5s5AAAAcAAJ&redir\_esc=y), from the Bavarian State Library, with a different title-page from the one reproduced by Paclt (1955) and one in the Central Agricultural Library in Warsaw. In this copy the name *Plebejus* is spelled with a 'j', identical to the spelling in Linnaeus (1758) and in accordance with the largely prevalent usage, at least prior to the publication by Paclt (1955). In the third edition of Kluk's work (1802) this name is spelled *Plebeyus* (Beuret 1961, p. 318; see also Bálint et al., 2001).
- 7. Eventually, Bálint et al. (2001) suggested that this name should be cited as *Plebejus* Kluk, 1780, applying the First Reviser Rule to determine precedence under Article 80.6.4. Even though such a proposal could be acceptable, since Opinion 278 (1954a) was based on apparently incomplete information, Bálint et al. failed to submit a formal application to this effect. The present application is aimed at fixing this spelling and publication date through an Official Correction to be issued by the Commission under Article 80.4.
- 8. Whereas the problem is more relevant for *Plebejus*, because of the existence of spelling variants, we think that the change of date consequent to recognizing Kluk (1780) rather than Kluk (1802) as the relevant source publication must also apply to the other three lepidopteran genera, *Heliconius*, *Nymphalis* and *Danaus*.

In accordance with Article 80.4 of the Code, which states that the Commission can publish an Official Correction of an error or omission in an Opinion without further

vote when the correction does not negate the Opinion or its consequences, notice is hereby given that:

(1) the corresponding entries in the 'Official Lists of Indexes and Names in Zoology' are corrected to read:

DANAIDAE (correction of DANAIDES) Boisduval, [1833], *Icon. hist. Lépid. Europ.*, 1(9): 84 (type genus: *Danaus* Kluk, 1780) (Insecta, Lepidoptera). Direction 99; Official Correction BZN 71, September 2014.

DANAIDES Boisduval, [1833], *Icon. hist. Lépid. Europ.*, **1**(9): 84 (type genus: *Danaus* Kluk, 1780) (an incorrect original spelling for DANAIDAE Boisduval, [1833]). Direction 99;

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DANAIDIDAE Reuter, 1897, Acta Soc. Sci. fenn., 22: 301 (type genus: Danaus Kluk, 1780) (an incorrect subsequent spelling for DANAIDAE Boisduval, [1833]). Direction 99;

Official Correction BZN 71, September 2014.

plexippus, Papilio, Linnaeus, 1758, Systema Naturae, Ed. 10, vol. 1, p. 471, as interpreted by the neotype designated under the plenary power, namely the male specimen figured by Clark, 1941 (Proc. U.S. nat. Mus., 90: pl. 71, fig. 1) and refigured in Opinion 282, pl. 2 (type locality: 'Pennsylvania') (specific name of the type species of Danaus Kluk, 1780) (Insecta, Lepidoptera). Op. 282; Official Correction BZN 71, September 2014.

Apostraphia Hübner, 1816, Verz. bekannt. Schmett., (1): 13 (a junior objective synonym of Heliconius Kluk, 1780). Op. 382; Official Correction BZN 71, September 2014.

charithonia, Papilio, Linnaeus, 1767, Systema Naturae, Ed. 12, vol. 1, part 2, p. 757 (specific name of the type species of *Heliconius* Kluk, 1780) (Insecta, Lepidoptera). Op. 382; Official Correction BZN 71, September 2014.

Heliconia Godart, 1819, Ency. méth., 9 (Ins.): 203 (a junior objective synonym of Heliconius Kluk, 1780). Op. 382; Official Correction BZN 71, September 2014.

HELICONIDAE Swainson, 1827, *Phil. Mag.* (n.s.), 1: 187 (type genus: *Heliconius* Kluk, 1780) (an incorrect original spelling for HELICONIDAE Swainson, 1827). Direction 54; Official Correction BZN 71, September 2014.

HELICONIIDAE (correction of HELICONIDAE) Swainson, 1827, *Phil. Mag.* (n.s.), 1:187 (type genus: *Heliconius* Kluk, 1780) (Insecta, Lepidoptera). Direction 54; Official Cor-

rection BZN 71, September 2014.

Heliconius Kluk, 1780, Zwierz. Hist. nat. pocz. gospod., 4: 82 (gender: masculine) (type species, by designation by Hemming, 1933 (Entomologist, 66: 223): Papilio charithonia Linnaeus, 1767, Systema Naturae, Ed. 12, vol. 1, part 2, p. 757) (Insecta, Lepidoptera). Op. 382; Official Correction BZN 71, September 2014.

Heliconius Latreille, 1804, Nouv. Dict. Hist. nat., 24 (Tab.): 185, 199 (a junior homonym of Heliconius Kluk, 1780). Op. 382; Official Correction BZN 71, September 2014.

NYMPHALIDAE Swainson, 1827, *Phil. Mag.* (n.s.), **1**(2): 187 (type genus: *Nymphalis* Kluk, 1780) (Insecta, Lepidoptera). Direction 99; Official Correction BZN **71**, September 2014.

Nymphalis Kluk, 1780, Zwierz. Hist. nat. pocz. gospod., 4: 86 (gender: masculine) (type species, by designation by Hemming, 1933 (Entomologist, 66: 223): Papilio polychloros Linnaeus, 1758, Systema Naturae, Ed. 10, vol. 1, p. 477) (Insecta, Lepidoptera). Op. 278, Official Correction BZN 71, September 2014.

polychloros, Papilio, Linnaeus, 1758, Systema Naturae, Ed. 10, vol. 1, p. 477 (specific name of the type species of Nymphalis Kluk, 1780) (Insecta, Lepidoptera). Op. 278;

Official Correction BZN 71, September 2014.

Plebejus Kluk, 1780, Zwierz. Hist. nat. pocz. gospod., 4: 89 (gender: masculine) (type species, by designation by Hemming, 1933 (Entomologist, 66: 224): Papilio argus Linnaeus, 1758, Systema Naturae, Ed. 10, vol. 1, p. 483, as interpreted by reference to the male genitalia figured by Chapman, 1909 (in Tutt, Nat. Hist. brit. Butts., 3: pl. xx, fig. 1)) (Insecta, Lepidoptera). Op. 278; Official Correction BZN 71, September 2014.

- argus, Papilio, Linnaeus, 1758, Systema Naturae, Ed. 10, vol. 1, p. 483, as interpreted by reference to the male genitalia figured by Chapman, 1909 (in Tutt, Nat. Hist. brit. Butts., 3: pl. XX, fig. 1) (specific name of the type species of Plebejus Kluk, 1780) (Insecta, Lepidoptera). Op. 269; Official Correction BZN 71, September 2014.
- (2) The Commission has accepted the printed edition of Kluk (1780) from the Bavarian State Library currently accessible at http://books.google.it/books/about/Zwierz%C4%85t\_domowych\_i\_dzikich\_osobliwie\_k.html?id=S5s5AAA AcAAJ&redir\_esc=y as the source edition for the names amended in (1).

## Acknowledgments

Emilio Balletto & Simona Bonelli are grateful to Alessandro Minelli (*Padova, Italy*) for his advice on a draft of this application.

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